

REMARKS

In response to the Office Action dated July 19, 2004, Applicants respectfully request reconsideration and withdrawal of the rejections of the claims.

In response to the Examiner's request, the paragraph beginning at page 8, line 11 of the specification has been amended to insert the serial number for the application referenced therein.

In response to the objection to the claims, the spelling of the word "invocation" has been corrected where it appears in the claims.

Claims 1-18 were rejected under the second paragraph of 35 U.S.C. § 112. With reference to claim 1, the rejection states that the phrase "reading from said first device a first set of information that is published on the network to provide clients with access to the service" is confusing, in that the direct object being provided is not clear. It is respectfully submitted that, when the claim is read with an understanding of the disclosed subject matter, its meaning is clear to a person of ordinary skill in the art. More particularly, the claim recites "reading from said first device a first set of information." Referring to the exemplary embodiment of Figure 4, the first device is the smart card 20, and the first set of information comprises the application specific information 28. This information is read by the terminal 24. Thus, the direct object, i.e. that which is being read, is the first set of information. The remaining portion of the phrase identified in the Office Action describes the nature of this information, i.e., it is information that is published on the network to provide clients with access to a service. In the example of Figure 4, the application specific information 28 forms one component of a service bundle 18a that is uploaded to a directory facilities server 16 for publication on the network 14. As described in connection with Figure 1, the

publication of the service bundle on the network enables clients 12 to obtain access to the service provided by the smart card application.

It is respectfully submitted that the claim clearly describes this subject matter in a definite fashion. To eliminate any possible basis for rejection, however, the latter portion of the phrase, that describes the nature of the first set of information, has been delineated with a comma.

Claim 1 also recites that an address is read from the first device, and that this address is associated with a second set of information that is also published on the network to provide clients with access to the service. In the exemplary embodiment of Figure 4, the address that is read from the smart card comprises the URL 32. This URL is associated with generic information 26 for the application, i.e., the second set of information. This generic information also forms a component of the service bundle 18a that is published on the network.

The Office Action contains similar objections to this portion of claim 1. Again, while it is respectfully submitted that the original claim language clearly describes the subject matter, a comma has been inserted to confirm that it is an address which is read from the first device, and that the remaining portion of the phrase describes the attributes of that address.

The rejection of claim 1 also states that it is not clear who or what is doing the reading step, the using step and the publishing step recited in the claim. It is respectfully submitted that the second paragraph of 35 U.S.C. § 112 does not impose any requirement that the claims be limited in such a manner. Rather, as presently written, the claims are broad enough to read upon any entity that is

capable of performing those steps. The fact that the claim is broad does not inherently make it indefinite. See MPEP § 2173.04.

With respect to claim 2, the Office Action states that it is not clear how the definition of the sets of information can possibly affect the steps of the method being set forth in claim 1. It is not clear how this statement relates to a rejection under the second paragraph of 35 U.S.C. § 112. The rejection does not allege any indefiniteness in understanding the scope of the subject matter being claimed. Rather, it appears to be directed to the requirement of 37 C.F.R. § 1.75(c), which states that a dependent claim must refer back to and further limit another claim.

In the present case, claim 1 recites that both the first and second sets of information are published on the network to provide clients with access to the service. It does not, however, distinguish between the content of those sets of information. Thus, in theory, claim 1 reads upon an implementation of the invention in which the first set of information, i.e., that which is read from the first device, could be generic information, and the second set of information, i.e., that which is retrieved at the address read from the first device, could be implementation-specific. Claim 2 limits the subject matter recited in claim 1, however, since it requires the first set of information to be implementation-specific, and the second set of information to be generic.

With respect to claim 10, the Office Action states that it is not clear how the decryption of a second set of encrypted information can validate the second set. As specified in claim 10, the decryption is performed with a key that is stored on the first device. When a valid set of encrypted information is decrypted with such a key, the resulting original information will have a predetermined structure that conforms with

the appropriate format for the second set of information. However, if invalid information is decrypted with the stored key, the result is likely to be gibberish. Thus, by examining the format of the decrypted information, a determination can be made whether that information is valid.

The remaining rejections of the claims are similar to those discussed above. For the reasons presented, it is respectfully submitted that all claims comply with the requirements of 35 U.S.C. § 112. If the Examiner continues to believe that the claims are indefinite, he/she is respectfully requested to contact Applicants' undersigned attorney, to discuss the basis for such belief in greater detail.

Claims 1-7, 11-17 and 20-28 were rejected under 35 U.S.C. § 103, on the grounds that they were considered to be unpatentable over the prior art described in the background portion of the application, in view of the Rezvani et al. '838 patent. In essence, the statement of rejection characterizes the "heart" of the claimed invention as storing an address, or URL, in a device so that an interface to which the device is connected can obtain such address and use it to download an object from elsewhere in a network. The rejection goes on to state that the Rezvani patent teaches such a concept, and concludes that it would have been obvious to use the teaching of the Rezvani patent in a method for providing services in a distributed computing network. It is respectfully submitted that this rejection is unsupportable, for a number of reasons.

First, the Office Action mischaracterizes the invention. The novelty of the claimed invention does not reside merely in storing a URL on a device that identifies the location of an object that can be downloaded from a remote site. Rather, as described in the background portion of the application, the claimed invention solves

the problem of using devices having limited memory capacity, such as smart cards and PDAs, as hosts for services in a distributed computing environment. Because of their limited memory capacity, these devices may not be able to store all of the information that needs to be published on a network for remote clients to access the services provided by the hosts. To overcome this constraint, the present invention utilizes an approach in which the information to be published on the network is divided into at least two portions. One portion of this information is stored on the host device itself. As described previously, in the exemplary embodiment of Figure 4 this information comprises the implementation-specific component of a service bundle. The other portion of the information is stored on a separate device, and is retrieved by means of an address carried on the host device. In the embodiment of Figure 4, the URL 32 provides the address for the generic information 26 retrieved from the service provisioning server 30. These two sets of information are then combined to form the service bundle 18a that is published on the network. Thus, the last clause of claim 1 recites the step of "publishing a service bundle on said network that contains at least some of the information from *each* of said first and second sets of information." When the claim is read as a whole, it can be appreciated that it encompasses more than merely storing a URL on a device that identifies the location of an object that can be downloaded from a different site on the network.

Second, it is respectfully submitted that the Office Action does not meet the criteria for a *prima facie* case of obviousness. As set forth in MPEP § 2143, one of these criteria is that there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine reference teachings. In the present case, the Office Action

does not identify any suggestion that would cause a person of ordinary skill to refer to the teachings of the Rezvani patent, when faced with the problems addressed by the present invention. The Rezvani patent is not concerned with the problems associated with using devices having limited memory capacity as hosts in a distributed computing environment. Rather, as set forth in the background portion of the patent, the Rezvani patent is directed to the automatic *registration* of devices at remote sites, so that such devices can be controlled by a user having access to the remote sites. It is not concerned with the mechanism by which a service bundle is constructed and published on a network to provide clients with access to the services rendered by hosts on that network.

The Office Action has not identified any nexus between the teachings of the Rezvani patent and the prior art described in the background portion of the application that would lead a person of ordinary skill in the art to apply any of the teachings of the Rezvani patent to such prior art. Rezvani's registration procedure does not deal with the publication of service bundles on a network. As such, the Office Action has failed to meet the first criterion for establishing a *prima facie* case of obviousness.

Third, another of the criteria for a *prima facie* case of obviousness, as set forth in MPEP § 2143, is that the prior art references, when combined, "must teach or suggest all the claim limitations." As noted above, claim 1 recites that two sets of information are read from respective devices, and that a service bundle is published on the network that contains at least some of the information from *each* of the first and second sets of information. The rejection of claim 1 does not address this claimed subject matter. Even if the teachings of the Rezvani patent could somehow

be applied to the prior art described in the background portion of the application, the result would merely be the use of an URL stored on a device to download an object from a remote location. Nowhere, however, does the Rezvani patent suggest that such a downloaded object should be combined with another set of information to form a service bundle that is published on a network. In other words, the Rezvani patent does not contain any teaching that would lead a person of ordinary skill in the art to construct a service bundle from two separate sets of information that are respectively stored on different devices.

For at least these reasons, therefore, it is respectfully submitted that the subject matter of claim 1 is patentably distinct from the prior art of record. For similar reasons, the subject matter of claim 14 is not suggested by any teachings of the Rezvani patent.

Claims 11 and 26 are directed to another aspect of the invention, namely the use of a terminal, or the like, as a gateway between the application on a smart card and the distributed computing environment. In this aspect of the invention, the address that is stored on the smart card is used to retrieve a proxy for the application from another device on the network. This proxy is then executed within the terminal to enable the terminal to act as a gateway. In this function, the terminal receives calls for the application from clients on the network, and converts these calls into commands that are transmitted to the card, for processing by the application.

The Office Action does not address any of these features recited in claims 11 and 26. Rather, these claims are rejected on the same rationale as claim 1, relying on the mischaracterization that the heart of the invention resides in the storing of an address on a device to download an object from elsewhere in a network. The

rejection does not identify any teaching in the Rezvani patent that suggests that such an object can be a proxy for an application stored on a smart card, nor that such a proxy is executed within a device, such as a terminal, for converting calls from clients on the network into commands that are transmitted to the card application.

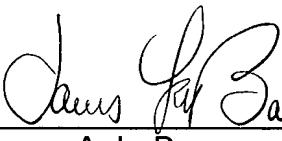
For this additional reason, therefore, the Office Action has failed to establish a *prima facie* case of obviousness with respect to claims 11 and 26.

The remaining claims are submitted to be patentable over the cited prior art for at least the reasons discussed above. In addition, a number of other, more specific, features of the invention are recited in the dependent claims, which provide additional bases for the patentability of these claims. In view of the foregoing distinctions, however, a detailed discussion of these other features are believed to be unnecessary at this time.

Reconsideration and withdrawal of the rejections, and allowance of all pending claims are respectfully requested.

Respectfully submitted,
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